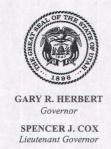
OIL, GAS & MINING



## State of Utah

**DEPARTMENT OF NATURAL RESOURCES** 

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

June 10, 2015

Steve Schnoor Kennecott Utah Copper LLC 4700 Daybreak Parkway South Jordan, Utah 84095

Subject: Summary of Investigation - Clay Hollow, Kennecott Barneys Canyon Mining,

Barneys Canyon Mine, M/035/0009, Salt Lake County, Utah

Dear Mr. Schnoor:

On May 19, 2015, the Division of Oil, Gas and Mining (Division) received the correspondence letter summarizing the investigation into the source and the cause of sediment from BC-5, the northwestern heap leach pad at Barneys Canyon, into the Clay Hollow drainage. The corrective action is also outlined. The Division has reviewed the report and needs the following information:

- 1. (lah) All submittals need to be in a readable format. Please provide the following, preferably on 11"x17" sheets:
  - a) Table A-1
  - b) Figure 1- Arsenic & Thallium
  - c) Figure 1- Cyanide and Gold
- 2. (lah) The information provided in the correspondence letter should be included in Appendix N-1 of the Notice of Intention as an introduction or Executive Summary to this appendix.
- 3. (pnb) The Barneys Canyon Characterization Report (December 2014, page 3-1) indicates that both "arsenic and thallium were the primary constituents of concern at the site". Briefly include both findings (page 2) and corrective measures (page 4) as they relate to thallium.
- 4. (mpb) Cover Letter, Page 3, second paragraph, describes the September 13, 2013, storm as a "1-in-100 level event." Please use standard intensity/duration/frequency (IDF) terminology.
- 5. (mpb) The Division understands that it is impractical to populate the hillsides with rain gages and appreciates the addition of a weather station at Barney's Canyon. It is also accepted that a storm event exceeding practical design criteria occurred over BC-5 and its immediate surroundings, but it is inappropriate to imply that the 3.7" of rain measured "near the Barney's Canyon site" (Keystone) is what fell on BC-3.

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Mountainous terrain can create orographic effects on weather at very local scales such that precipitation intensities can vary significantly within short lateral distances. This is evidenced by the data summarized in Table B-1. Please provide a map showing the rain gage locations used in Table B-1, and include the location of the new Barney's Canyon station.

Please resubmit with all changes using form MR-REV, as the document will be added to the Barneys Canyon Notice of Intention to Commence Large Operations (NOI). Provide the necessary changes to the NOI and all other appropriate documents with a post remediation storm water sampling plan for the applicable elements after storm events.

The Division recommends that remediation work continue as weather permits including buttressing and capping the leach pads.

The resubmittal will be reviewed and stamped approved or accepted when complete. A copy will returned for your records at that time. The approval or acceptance of a complete notice of intention does not relieve an operator from his responsibility to comply with the applicable statutes, rules, regulations, and ordinances of all local, state and federal agencies with jurisdiction over any aspect of the operator's mining operations.

Please contact Leslie Heppler at 801-538-5257 or me at 801-538-5261 if you have questions about this action. Thank you for your cooperation.

Sincerely,

Paul B. Baker

Minerals Program Manager

PBB: lah: eb

cc: Doug Bacon, Hans Millican, Brian Hamos, Dan Hall, and David Allison, DEQ (dbacon@utah.gov, hmillican@utah.gov, bhamos@utah.gov, dhall@utah.gov, dallison@utah.gov, Kerri Fiedler, EPA (fiedler.kerri@epa.gov)
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